



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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DATA MATRIX

Date Jan. 30, 2019	EPA Reg No./File Symbol 84009-	Page 1 of 19
Applicant's/Registrant's Name & Address Ragan and Massey, Inc. 101 Ponchatoula Parkway Ponchatoula, LA 70454	Product RM Glufosinate-Ammonium Technical	

Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
PRODUCT SPECIFIC DATA REQUIREMENTS					
830.1550	Product identity and composition	50734401	Ragan and Massey, Inc.	OWN	
830.1600	Description of Materials Used to Produce the Product	50734401	Ragan and Massey, Inc.	OWN	
830.1620	Description of the Production Process	50734401	Ragan and Massey, Inc.	OWN	
830.1650	Description of the Formulation Process				Not applicable ¹
830.1670	Discussion of Formation of Impurities	50734401	Ragan and Massey, Inc.	OWN	
830.1700	Preliminary Analysis	50734402	Ragan and Massey, Inc.	OWN	
		50734403	Ragan and Massey, Inc.	OWN	
		50734404	Ragan and Massey, Inc.	OWN	
830.1750	Certified Limits	50734401	Ragan and Massey, Inc.	OWN	
830.1800	Enforcement Analytical Method	50734402	Ragan and Massey, Inc.	OWN	
		50734403	Ragan and Massey, Inc.	OWN	
		50734404	Ragan and Massey, Inc.	OWN	
830.6302	Color	50734405	Ragan and Massey, Inc.	OWN	
		50734415	Ragan and Massey, Inc.	OWN	
830.6303	Physical State	50734405	Ragan and Massey, Inc.	OWN	
		50734415	Ragan and Massey, Inc.	OWN	
830.6304	Odor	50734405	Ragan and Massey, Inc.	OWN	
		50734415	Ragan and Massey, Inc.	OWN	
830.6313	Stability to Normal and Elevated Temperatures, Metals and Metal Ions	50734415	Ragan and Massey, Inc.	OWN	
830.6314	Oxidation/Reduction: Chemical Incompatibility	50734408	Ragan and Massey, Inc.	OWN	

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Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.6315	Flammability	50734416	Ragan and Massey, Inc.	OWN	Waiver ²
830.6316	Explosibility	50734409	Ragan and Massey, Inc.	OWN	
830.6317	Storage Stability	50734416	Ragan and Massey, Inc.	OWN	PRN 92-5 ³
830.6319	Miscibility	50734416	Ragan and Massey, Inc.	OWN	Not applicable ⁴
830.6320	Corrosion Characteristics	50734416	Ragan and Massey, Inc.	OWN	PRN 92-5 ³
830.6321	Dielectric Breakdown Voltage	50734416	Ragan and Massey, Inc.	OWN	Not required ⁵
830.7000	pH	50734405	Ragan and Massey, Inc.	OWN	
		50734415	Ragan and Massey, Inc.	OWN	
830.7050	UV/Visible Absorption	50734405	Ragan and Massey, Inc.	OWN	
		50734415	Ragan and Massey, Inc.	OWN	
830.7100	Viscosity	50734416	Ragan and Massey, Inc.	OWN	Not applicable ⁶
830.7200	Melting Point/Melting Range	50734405	Ragan and Massey, Inc.	OWN	
		50734415	Ragan and Massey, Inc.	OWN	
830.7220	Boiling Point/Boiling Range	50734416	Ragan and Massey, Inc.	OWN	Not applicable ⁷
830.7300	Density/Relative Density/Bulk Density	50734405	Ragan and Massey, Inc.	OWN	
		50734415	Ragan and Massey, Inc.	OWN	
830.7370	Dissociation Constants in Water	50734413	Ragan and Massey, Inc.	OWN	
830.7520	Particle size, fiber length, and diameter distribution	50734416	Ragan and Massey, Inc.	OWN	Waiver ⁸
830.7550	Partition Coefficient (n-octanol/water), Shake Flask Method	50734415	Ragan and Massey, Inc.	OWN	
830.7560	Partition Coefficient (n-octanol/water), Generator Method				See 830.7550

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Applicant's/Registrant's Name & Address

Ragan and Massey, Inc.
101 Ponchatoula Parkway
Ponchatoula, LA 70454

Product

RM Glufosinate-Ammonium Technical

Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.7570	Partition Coefficient (n-octanol/water), Estimation by Liquid Chromatography				See 830.7550
830.7840	Water Solubility: Column Elution Method, Shake Flask Method	50734415	Ragan and Massey, Inc.	OWN	
830.7860	Water Solubility: Generator Column Method				See 830.7840
830.7950	Vapor Pressure	50734415	Ragan and Massey, Inc.	OWN	
870.1100	Acute oral toxicity – rat	00142430 00142431 00142432		OLD OLD OLD	See endnote ⁹
870.1200	Acute dermal toxicity – rat	00142436 00142437		OLD OLD	See endnote ¹⁰
870.1300	Acute inhalation toxicity – rat	00151496 00151497		OLD OLD	See endnote ¹¹
870.2400	Eye irritation	00142438		OLD	See endnote ¹²
870.2500	Skin irritation	00142438		OLD	See endnote ¹³
870.2600	Skin sensitization	00142439		OLD	See endnote ¹⁴
GENERIC DATA REQUIREMENTS					
850.2100	Acute Avian Oral Toxicity	00142450 00142451		OLD OLD	See endnote ¹⁵

Signature

Name and Title

Ann M. Tillman, PhD | Agent

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Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
850.2200	Acute Avian Dietary Toxicity	00150988 00150989		OLD OLD	See endnote ¹⁶
850.2400	Wild Mammal Toxicity				See 870 series
850.2300	Avian Reproductive Toxicity	40345649 40345650		OLD OLD	See endnote ¹⁷
850.2500	Simulated or Actual Field Testing				Not required
850.1075	Freshwater Fish Toxicity	00142454 00142455 00144338 00159913 00159914		OLD OLD OLD OLD OLD	See endnote ¹⁸
850.1010	Freshwater Invertebrate Toxicity	00142456 00159915 00144339 00145067		OLD OLD OLD OLD	See endnote ¹⁹
850.1025, 850.1035, 850.1045, 850.1055, 850.1075	Acute Toxicity Estuarine and Marine Organisms	41396104 41396105 41396107 41396108 41396109 41396110 42262403		OLD OLD OLD OLD OLD OLD OLD	See endnote ²⁰

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Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
850.1300	Aquatic Invertebrate Life Cycle (Freshwater)	40501010		OLD	See endnote ²¹
850.1350	Aquatic Invertebrate Life Cycle (Saltwater)				Not required ²²
850.1400	Fish Early Life Stage (Freshwater)				Not required ²³
850.1400	Fish Early Life Stage (Saltwater)				Not required ²⁴
850.1500	Life Cycle Fish				Not required ²⁵
850.1710, 850.1730, 850.1850	Aquatic Organisms Bioavailability, Biomagnification, Toxicity	40501017 41323130		OLD OLD	See endnote ²⁶
850.1950	Simulated or Actual Field Testing for Aquatic Organisms				Not required
850.1735	Whole Sediment: Acute Freshwater Invertebrates				Not required
850.1740	Whole Sediment: Acute Marine Invertebrates				Not required
N/A	Whole Sediment: Chronic Invertebrate Freshwater and Marine				Not required
850.3020	Honey Bee Acute Contact Toxicity	40345654 41364002		OLD OLD	See endnote ²⁷
850.3030	Honeybee Toxicity of Residues on Foliage				Not required
850.3040	Field Testing for Pollinators				Not required
870.6100	Delayed Neurotoxicity (Acute) – Hen				Not required

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Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
870.6200	Acute Neurotoxicity – Rat	45190701 45190702 45190703 45190704		OLD OLD OLD OLD	See endnote ²⁸
870.3100	90-Day Oral: Rodent	40345609 44076201 44076202 44076203 44076206 44076207 44068501 45179103		OLD OLD OLD OLD OLD OLD OLD OLD	See endnote ²⁹
870.3150	90-Day Oral: Non-Rodent	40345608 44068502		OLD OLD	See endnote ³⁰
870.3200	21/28-Day Dermal Toxicity	40345605		OLD	See endnote ³¹
870.3250	90-Day Dermal Toxicity				Not required
870.3465	90-Day Inhalation Toxicity	40345606 47058101	Bayer CropScience LP	OLD PAY	See endnote ³²
870.6100	28-Day Delayed Neurotoxicity Hen				Not required
870.6200	90-Day Neurotoxicity	45179101 45179102 45297001		OLD OLD OLD	See endnote ³³

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101 Ponchatoula Parkway
Ponchatoula, LA 70454

Product

RM Glufosinate-Ammonium Technical

Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
870.4100	Chronic Oral Rodent	40345607 41144701 44539501		OLD OLD OLD	See endnote ³⁴
870.4200	Carcinogenicity	40345607 40345609 41144701 41144702 44539501		OLD OLD OLD OLD OLD	See endnote ³⁵
870.3700	Reproduction/Developmental Toxicity Screening Test	00142445 00142446 00151499 00151500 40345610 40345611 41144703 43829405 44076204 44076205 44076209		OLD OLD OLD OLD OLD OLD OLD OLD OLD OLD OLD	See endnote ³⁶
870.3800	2-Generation Reproduction: Rat	40345612		OLD	See endnote ³⁷
870.6300	Developmental Neurotoxicity Study	46455701	Bayer CropScience LP	PAY	See endnote ³⁸

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Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
870.5100	Bacterial Reverse Mutation Test	00142440 (AC072962)		OLD	See endnote ³⁹
870.5300, 870.5375	<i>In vitro</i> Mammalian Cell Assay	40345616		OLD	See endnote ⁴⁰
870.5385, 870.5395, 870.5450, 870.5550	<i>In vivo</i> Cytogenetics and Other Effects	00142441 (AC072962) 40345614 41144704		OLD OLD OLD	See endnote ⁴¹
870.7485	Metabolism and Pharmacokinetics	40345640 40345642 43766913 43766914 43778402		OLD OLD OLD OLD OLD	See endnote ⁴²
870.7200	Companion Animal Safety				Not required
870.7600	Dermal Penetration	40345620 45922103		OLD OLD	See endnote ⁴³
870.7800	Immunotoxicity	48491101	Bayer CropScience LP	PAY	See endnote ⁴⁴
875.1100	Dermal Exposure – Outdoor		PHED	PL	See endnote ⁴⁵
875.1200	Dermal Exposure - Indoor				Not required
875.1300	Inhalation Exposure – Outdoor		PHED	PL	See endnote ⁴⁵
875.1400	Inhalation Exposure - Indoor				Not required
875.1500	Biological Monitoring		PHED	PL	See endnote ⁴⁵

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Ponchatoula, LA 70454

Product

RM Glufosinate-Ammonium Technical

Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
875.1600	Data Reporting and Calculations		PHED	PL	See endnote ⁴⁵
875.1700	Product Use Information		PHED	PL	See endnote ⁴⁵
875.2100	Dislodgeable Foliar Residue and Turf Transferable Residues	45251401		OLD	
875.2200	Soil Residue Dissipation	44972201		OLD	
		44972202		OLD	
		44972203		OLD	
		44972204		OLD	
		44972205		OLD	
		44972206		OLD	
		44972207		OLD	
		44983501		OLD	
		45262901		OLD	
		45262902		OLD	
		45663701		OLD	
		45663702		OLD	
		45663703		OLD	
		46042401		OLD	
		46042402		OLD	
875.2400	Dermal Exposure				See 875.2200
875.2500	Inhalation Exposure				See 875.2200

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Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
875.2600	Biological Monitoring				See 875.2200
875.2700	Product Use Information				See 875.2200
875.2800	Descriptions of Human Activity				See 875.2200
875.2900	Data Reporting and Calculations				See 875.2200
875.3000	Nondietary Ingestion Exposure				See 875.2200

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Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)

201-1	Droplet Size Spectrum	42565901		OLD	
		42608401		OLD	
		42907401		OLD	
		43254001		OLD	
		43485601		OLD	
		43485602		OLD	
		43485603		OLD	
		43485604		OLD	
		43493801		OLD	
		43493802		OLD	
		43508001		OLD	
		43535801		OLD	
		43535802		OLD	
		43657601		OLD	
		43657602		OLD	
		43665401		OLD	
		43665402		OLD	
		43757801		OLD	
		43757802		OLD	
		43766501		OLD	
		43766502		OLD	
		43766503		OLD	
		43766504		OLD	

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Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)

201-1	Droplet Size Spectrum (cont.)	43781101		OLD	
		43803501		OLD	
		43832101		OLD	
		43832102		OLD	
		43845501		OLD	
		43845901		OLD	
		43925701		OLD	
		43953001		OLD	
		43953002		OLD	
		44010201		OLD	
		44070001		OLD	
		44100901		OLD	
		44134101		OLD	
		44178701		OLD	
		44310401		OLD	
		44640801		OLD	
		44640901		OLD	
		44641001		OLD	
		44696901		OLD	
		44747401		OLD	
		44763001		OLD	
		44878601		OLD	
		44908901		OLD	

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Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
201-1	Droplet Size Spectrum (cont.)	45536001		OLD	
202-1	Droplet Size Spectrum				See 201-1
850.4100	Tier 1: Seedling Emergence	41396111 48531301 48718501	Bayer CropScience LP Bayer CropScience LP	OLD PAY PAY	See endnote ⁴⁶
850.4150	Tier 1: Vegetative Vigor	41396112 41396113 47542602	Bayer CropScience LP	OLD OLD PAY	See endnote ⁴⁷
850.4400, 850.4500	Tier 1: Aquatic Plant Growth	40345653 42262404 47542603 48444816 48444817	Bayer CropScience LP Bayer CropScience LP Bayer CropScience LP	OLD OLD PAY PAY PAY	See endnote ⁴⁸
850.4100	Tier 2: Seedling Emergence	41396111 48531301 48718501	Bayer CropScience LP Bayer CropScience LP	OLD PAY PAY	See endnote ⁴⁹
850.4150	Tier 2: Vegetative Vigor	41396112 41396113 47542602	Bayer CropScience LP	OLD OLD PAY	See endnote ⁵⁰

Signature 	Name and Title Ann M. Tillman, PhD Agent	Date Jan. 30, 2019
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DATA MATRIX

Date Jan. 30, 2019	EPA Reg No./File Symbol 84009-	Page 14 of 19
Applicant's/Registrant's Name & Address Ragan and Massey, Inc. 101 Ponchatoula Parkway Ponchatoula, LA 70454	Product RM Glufosinate-Ammonium Technical	
Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
850.4400, 850.4500	Tier 2: Aquatic Plant Growth	40345653 42262404 47542603 48444816 48444817	Bayer CropScience LP Bayer CropScience LP Bayer CropScience LP	OLD OLD PAY PAY PAY	See endnote ⁵¹
850.4300	Terrestrial Field				Not required
850.4450	Aquatic Field				Not required
850.4025	Target Area Phytotoxicity				Not required
835.2120	Hydrolysis	40345656		OLD	See endnote ⁵²
835.2240	Photodegradation in Water	40345657 41323115		OLD OLD	See endnote ⁵³
835.2410	Photodegradation in Soil	40345658 41920102		OLD OLD	See endnote ⁵⁴
835.2370	Photodegradation in Air				Not required
835.4100	Aerobic Soil Metabolism	40345659 41323118 41323119 41920103		OLD OLD OLD OLD	See endnote ⁵⁵

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DATA MATRIX

Date Jan. 30, 2019	EPA Reg No./File Symbol 84009-	Page 15 of 19
Applicant's/Registrant's Name & Address Ragan and Massey, Inc. 101 Ponchatoula Parkway Ponchatoula, LA 70454	Product RM Glufosinate-Ammonium Technical	

Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
835.4200	Anaerobic Soil Metabolism	40501014		OLD	See endnote ⁵⁶
		41323119		OLD	
		41323120		OLD	
		41920103		OLD	
835.4300	Aerobic Aquatic Metabolism	40345660		OLD	See endnote ⁵⁷
		45204401		OLD	
		45204402		OLD	
835.4400	Anaerobic Aquatic Metabolism	46258601	Bayer CropScience LP	PAY	See endnote ⁵⁸
835.1230, 835.1240	Leaching/Adsorption/Desorption	40345662		OLD	See endnote ⁵⁹
		41323121		OLD	
835.1410	Volatility – Laboratory	41323122		OLD	See endnote ⁶⁰
		41920104		OLD	
835.8100	Volatility – Field				Not required
835.6100	Soil Field Dissipation Study	40345663		OLD	See endnote ⁶¹
		40345664		OLD	
		40345665		OLD	
		41323124		OLD	
		43110402		OLD	
		43766915		OLD	
		43766916		OLD	
835.6200	Aquatic Sediment Field Dissipation Study				Not required ⁶²

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DATA MATRIX

Date Jan. 30, 2019	EPA Reg No./File Symbol 84009-	Page 16 of 19
Applicant's/Registrant's Name & Address Ragan and Massey, Inc. 101 Ponchatoula Parkway Ponchatoula, LA 70454	Product RM Glufosinate-Ammonium Technical	
Ingredient: Glufosinate-ammonium (CAS No. 77182-82-2; Chemical Code: 128850)		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
835.6300	Forest Field Dissipation Study				Not required
835.6400	Combination and Tank Mixes				Not required
835.7100	Ground Water Monitoring				Not required
850.6100	Environmental Chemistry Methods	40345666 41323123 41920106 43766915 47542606 47542607 49055301	Bayer CropScience LP Bayer CropScience LP Bayer CropScience LP	OLD OLD OLD OLD PAY PAY PAY	See endnote ⁶³

Signature 	Name and Title Ann M. Tillman, PhD Agent	Date Jan. 30, 2019
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Endnotes for Data Matrix for RM Glufosinate-Ammonium Technical

- ¹ **830.1650** – These data are not required for registration of a technical product. See 830.1620.
- ² **830.6315** - Ragan and Massey, Inc. requests a waiver from the requirement of this data requirement since RM Glufosinate-Ammonium Technical is a solid and does not contain flammable components. Please refer to the Confidential Statement of Formula for RM Glufosinate-Ammonium Technical.
- ³ **830.6317, 830.6320** - Per PR Notice 92-5, storage stability and corrosion characteristics data are not required to be submitted unless specifically requested by the Agency. Ragan and Massey, Inc. will submit these data if required as a condition of registration.
- ⁴ **830.6319** - This data requirement is required when the product is an end use product and an emulsifiable liquid to be diluted with petroleum solvents. RM Glufosinate-Ammonium Technical is not an end-use product to be diluted with petroleum solvents prior to application. Therefore, these data are not applicable to RM Glufosinate-Ammonium Technical.
- ⁵ **830.6321** - These data are not required for registration of a technical product and are not applicable to RM Glufosinate-Ammonium Technical.
- ⁶ **830.7100** - These data are required when the product is a liquid. RM Glufosinate-Ammonium Technical is a solid and these data are not required.
- ⁷ **830.7220** - This guideline is not applicable to solid products.
- ⁸ **830.7520** - Ragan and Massey, Inc. is seeking a waiver for this data requirement for RM Glufosinate-Ammonium Technical because the product is not water insoluble and it is not a fibrous material.
- ⁹ **870.1100** – The studies cited are acceptable and satisfy the data requirement as per the July 25, 2012 Glufosinate Ammonium - Updated Human Health Risk Assessment for the Proposed New Use of Glufosinate Ammonium in/on Citrus Fruit (Crop Group 10), Pome Fruit (Crop Group 11), Stone Fruit (Crop Group 12), Olives and Sweet Corn (DP Barcode D387413) (Human Health RA).
- ¹⁰ **870.1200** – The studies cited are acceptable and satisfy the data requirement as per the Human Health RA.
- ¹¹ **870.1300** – The studies cited are acceptable and satisfy the data requirement as per the Human Health RA.
- ¹² **870.2400** – The study cited is acceptable and satisfies the data requirement as per the Human Health RA.
- ¹³ **870.2500** – The study cited is acceptable and satisfies the data requirement as per the Human Health RA.
- ¹⁴ **870.2600** – The study cited is acceptable and satisfies the data requirement as per the Human Health RA.
- ¹⁵ **850.2100** – The studies cited are acceptable and satisfy the data requirement as per the Sept. 12, 2014 Environmental Fate and Ecological Risk Assessment for the Registration Review of Glufosinate (EFED RA). Passerine data have not been submitted and these data were not required in the Registration Review DCI.
- ¹⁶ **850.2200** – The studies cited are acceptable and satisfy the data requirement as per the EFED RA.
- ¹⁷ **850.2300** – The studies cited are acceptable and satisfy the data requirement as per the EFED RA. Newly submitted data that are duplicative of previously submitted data are not cited.
- ¹⁸ **850.1075** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the EFED RA. Newly submitted data that are duplicative of previously submitted data are not cited.
- ¹⁹ **850.1010** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the EFED RA. Newly submitted data that are duplicative of previously submitted data are not cited.
- ²⁰ **850.1025, 850.1035, 850.1045, 850.1055, 850.1075** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the EFED RA.

Endnotes for Data Matrix for RM Glufosinate-Ammonium Technical

- ²¹ **850.1300** – The study cited is acceptable and satisfies the data requirement as per the EFED RA. Newly submitted data that are duplicative of previously submitted data are not cited.
- ²² **850.1350** – These data have not been submitted nor are required for Registration Review as per the EFED RA.
- ²³ **850.1400** – These data have not been submitted nor are required for Registration Review as per the EFED RA.
- ²⁴ **850.1400** – These data have not been submitted nor are required for Registration Review as per the EFED RA.
- ²⁵ **850.1500** – These data have not been submitted nor are required for Registration Review as per the EFED RA.
- ²⁶ **850.1710, 850.1730, 850.1850** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the EFED RA.
- ²⁷ **850.3020** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the EFED RA.
- ²⁸ **870.6200** – The studies cited are acceptable and satisfy the data requirement as per the Human Health RA.
- ²⁹ **870.3100** – The studies cited are acceptable and satisfy the data requirement as per the Human Health RA.
- ³⁰ **870.3150** – The studies cited are acceptable and satisfy the data requirement as per the Human Health RA.
- ³¹ **870.3200** – The study cited is acceptable and satisfies the data requirement as per the Human Health RA.
- ³² **870.3465** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the Human Health RA.
- ³³ **870.6200** – The studies cited are acceptable and satisfy the data requirement as per the Human Health RA. Unacceptable data are not cited.
- ³⁴ **870.4100** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the Human Health RA. Chronic dog data are not cited as these data are no longer required per the 2007 revisions to 40 CFR Part 158.
- ³⁵ **870.4200** – The studies cited are acceptable and satisfy the data requirement as per the Human Health RA.
- ³⁶ **870.3700** – The studies cited are acceptable and satisfy the data requirement as per the Human Health RA. Unacceptable data are not cited.
- ³⁷ **870.3800** – The study cited is acceptable and satisfies the data requirement as per the Human Health RA.
- ³⁸ **870.6300** – The study cited is acceptable and satisfies the data requirement as per the Human Health RA.
- ³⁹ **870.5100** – The study cited is acceptable and satisfies the data requirement as per the Human Health RA.
- ⁴⁰ **870.5300, 830.5375** – The study cited is acceptable and satisfies the data requirement as per the Human Health RA. Note: the incorrect MRID number was listed in the Human Health RA; the correct MRID number is cited.
- ⁴¹ **870.5385, 870.5395, 870.5450, 870.5550** – The studies cited are acceptable and satisfy the data requirement as per the Human Health RA.

Endnotes for Data Matrix for RM Glufosinate-Ammonium Technical

- ⁴² **870.7485** – The studies cited are acceptable and satisfy the data requirement as per the Human Health RA.
- ⁴³ **870.7600** – The studies cited are acceptable and satisfy the data requirement as per the Human Health RA.
- ⁴⁴ **870.7800** – The study cited is acceptable and satisfies the data requirement as per the Human Health RA.
- ⁴⁵ **875.1100, 875.1300, 875.1500, 875.1600, 875.1700** – PHED data were used to determine Short/Intermediate Term Agricultural Handler Exposure and Risk Estimates for Glufosinate Ammonium (Spot/Directed Spray Applications) in the Human Health RA.
- ⁴⁶ **850.4100** – The studies cited are supplemental but appear to satisfy the data requirement as per the EFED RA.
- ⁴⁷ **850.4150** – The studies cited are supplemental but appear to satisfy the data requirement as per the EFED RA.
- ⁴⁸ **850.4400, 850.4500** – The studies cited are acceptable or supplemental but appear to satisfy the data requirement as per the EFED RA. Additional data that were submitted, but not required, are not cited.
- ⁴⁹ **850.4100** – The studies cited are supplemental but appear to satisfy the data requirement as per the EFED RA.
- ⁵⁰ **850.4150** – The studies cited are supplemental but appear to satisfy the data requirement as per the EFED RA.
- ⁵¹ **850.4400, 850.4500** – The studies cited are acceptable or supplemental but appear to satisfy the data requirement as per the EFED RA. Additional data that were submitted, but not required, are not cited.
- ⁵² **835.2120** – The study cited is acceptable and satisfies the data requirement as per the EFED RA.
- ⁵³ **835.2240** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the EFED RA.
- ⁵⁴ **835.2410** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the EFED RA; unacceptable data are not cited.
- ⁵⁵ **835.4100** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the EFED RA; unacceptable data are not cited.
- ⁵⁶ **835.4200** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the EFED RA.
- ⁵⁷ **835.4300** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the EFED RA.
- ⁵⁸ **835.4400** – The study cited is supplemental but satisfies the data requirement as per the EFED RA; unacceptable data are not cited.
- ⁵⁹ **835.1230, 835.1240** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the EFED RA; unacceptable data are not cited.
- ⁶⁰ **835.1410** – The studies cited are acceptable and satisfy the data requirement as per the EFED RA.
- ⁶¹ **835.6100** – The studies cited are acceptable or supplemental but satisfy the data requirement as per the EFED RA; unacceptable or upgradeable data are not cited.
- ⁶² **835.6200** – These data are not required based on the uses proposed to be registered.
- ⁶³ **850.6100** – The studies cited, as well as MRID 49055301, appear to satisfy the data requirement as per the EFED RA.